

# Rosemount™ 975

## Air Shield



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### WARNING

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# 1 Description

This document provides installation instructions for the Air Shield (PN 00975-9000-0005). Use the Air Shield with the Rosemount 975 Flame Detectors.

Optical flame detectors are often used in highly polluted or dirty areas, where maintenance personnel must access the detector frequently to clean its optical window. The special air shield allows operators to install detectors in tough environmental conditions, where they may be exposed to oil vapors, sand, dust, and other particulate matter.

## 2 Installation

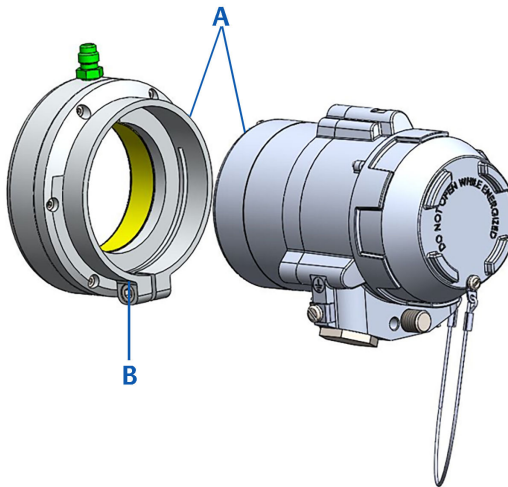
### 2.1 Prepare surfaces

#### Procedure

1. Verify that all connection surfaces are clean.
2. Open the lock screw.  
The screw is a captive screw.

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**Figure 2-1: Surface Preparation**



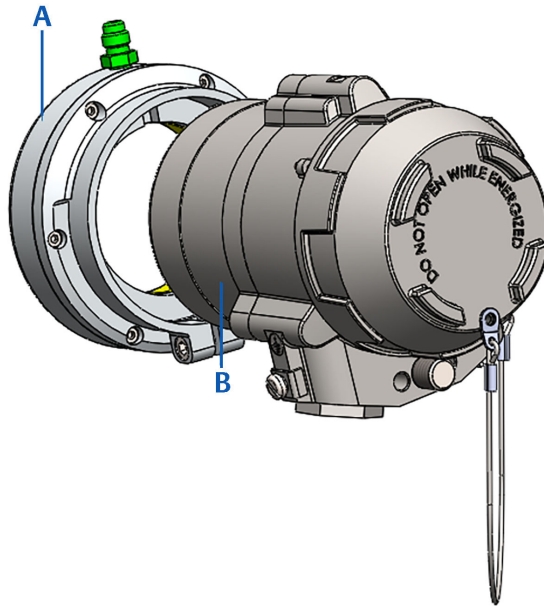
- A. Connection surfaces
  - B. Lock screw
-

## 2.2 Assemble Air Shield

### Procedure

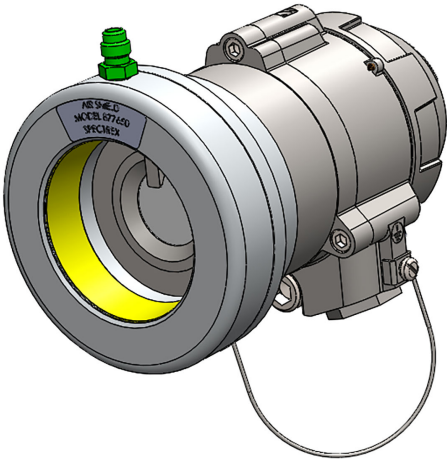
1. Assemble the Air Shield on the detector.

**Figure 2-2: Rear View**



- A. Air Shield rear view
- B. Detector

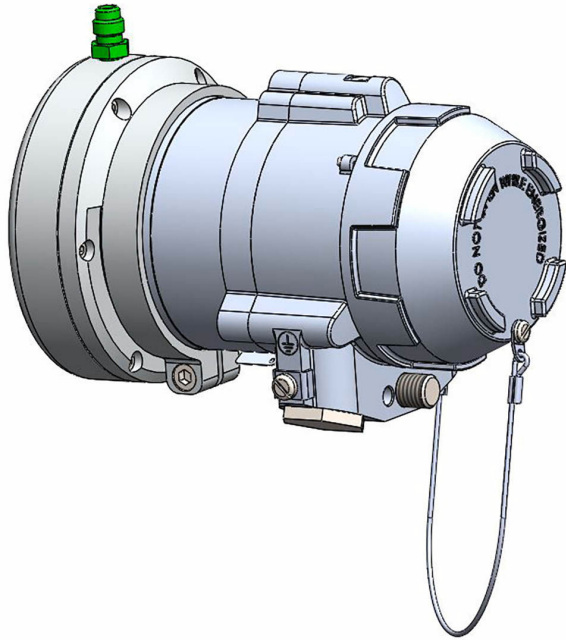
Figure 2-3: Front View





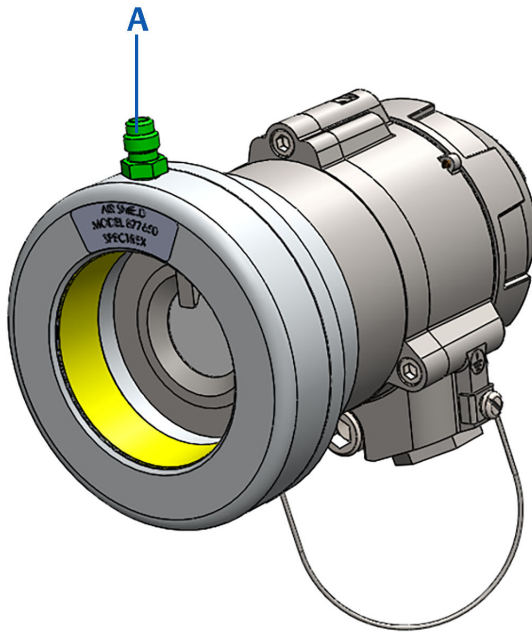
2. Lock the screw.

**Figure 2-4: Locking the Screw**



3. Attach the air pressure hose to the quick-fit air connection.

**Figure 2-5: Quick-Fit Air Connection**



A. Quick-fit air connection

### 3 Technical specifications

#### ⚠ WARNING

The temperature of the air supply to the air shield should never exceed 140 °F (60 °C).

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<b>Air pressure source</b>	Clean, dry, and oil-free air
<b>Inlet pressure</b>	30-40 psig (2-3 bar) 102 psig (7 bar)
<b>Fitting:</b>	7/16 in. – 20UNF-2A
<b>Air volume:</b>	1.5 cubic feet per minute (CFM)
<b>Tube outside diameter (OD)</b>	¼-in. (6 mm)
<b>Operation temperature</b>	-67 to 185 °F (-55 to 85 °C)

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#### Note

The Air Shield will limit the flame detector's cone of view to 70 ° (35 ° each side, vertically and horizontally).

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Quick Start Guide  
00825-0700-4975, Rev. AA  
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